

New Opportunities for Architecture Measurement

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Abstract. Recent industry progress in architecture definition, architecting tools, model-based systems engineering, and customer policy has created both a nexus of demand and opportunities to advance the state of architecture measurement. In this paper we describe recent industry working group results and propose architecture measures intended to meet the needs of systems engineers and their program managers as leading indicators of system development health. The measures are documented using the PSM (Practical Software and Systems Measurement) methodology. General techniques are proposed that take advantage of the opportunities afforded by the current architecture modeling environment to provide a basic measurement plan for architecture, including leveraging existing measurement concepts found within the Systems Engineering Leading Indicators. The result is a comprehensive and tailorable suite of measures that can provide decision-making data to program managers and technical program leaders.